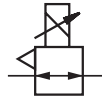


100X series Proportional pressure control valves G 1/4 or 1/4 NPT

Reliable, rugged, open loop control
Proportional I/P and E/P converters
ATEX certified units are available as intrinsically safe
Minimum vibration effects
IP65 environmental protection
Mounting bracket and connector included



Technical features

Medium:

Oil free, dry air, filtered to 5 µm

Output Pressure:

0,2 ... 1 bar

3 ... 15 psi

3 ... 27 psi

Supply pressure:

At least 0,7 bar above maximum required output pressure.
max. 5 bar

Flow capacity:

>300NI/min forward
& relief flow

Air consumption:

up to 1 bar (15 psi): 2,8 NI/min
up to 2 bar (27 psi): 4,0 NI/min

Linearity:

< 0,5% of span

Hysteresis:

< 0,5% of span

Response Time:

<0,35 seconds for 10 ... 90% or
90 ...10% of output pressure into
a 10cc load (1 bar range
instruments)

Temperature Sensitivity:

< 0,1% of span/°C between
-40 ... +85°C

Supply sensitivity:

<0,075% span output change
per % supply pressure change

Port sizes:

Main ports: G 1/4 or 1/4 NPT
Integral gauge ports:
G 1/4 or 1/4 NPT

Operating Temperature:

-40 ... +85°C

Air supply must be dry enough
to avoid ice formation at
temperatures below +2°C.

I.P. Rating:

IP65 in normal operation

Weight:

1,0 kg

Mounting Position:

Surface mounting bracket
provided.
Alternative mounting options
available

Vibration Effect:

5% of span: 4mmp-p 5 ... 15Hz
and 2g sine 15 ... 150Hz.

Materials

Body: Passivated zinc
die-casting, epoxy painted
Cover: Glass reinforced nylon
Diaphragms: Nitrile

Electrical parameters

Input Signal	mA versions 1 ... 4 bar: 2 wire 4 ... 20 mA; 3 wire 4 ... 20 mA +12 ... 24 V mA versions 6 ... 8 bar: 3 wire 4 ... 20 mA +12 ... 24 V voltage versions 1 ... 4 bar: 2 wire 0 ... 10 V; 3 wire 0 ... 10 V +12 ... 24 V voltage versions 6 ... 8 bar: 3 wire 0 ... 10 V +12 ... 24 V
Failure Mode	Output pressure falls to zero signal state when electrical supply fails
Connections	30 mm square connector provided (DIN 43650, form A) mountable in four orientations
Span/Zero	Adjustable up to 20 % output range - further information available

Technical data - standard models

Symbol	Output pressure	Input Signal	ATEX intrinsically safe	Weight (kg)	Model
	3 ... 15 psi	4 ... 20 mA		1,0	400100R
	0,2 ... 1 bar	4 ... 20 mA		1,0	402100R
	3 ... 15 psi	4 ... 20 mA	x	1,0	490100R
	0,2 ... 1 bar	4 ... 20 mA	x	1,0	492100R

Option selector

4★☆☆☆☆


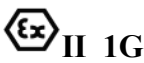
Input signal	Substitute
4 ... 20 mA	0
0 ... 20 mA	2
1 ... 5 V	3
0 ... 10 V / 1 ... 10 V	4
Intrinsically safe	9

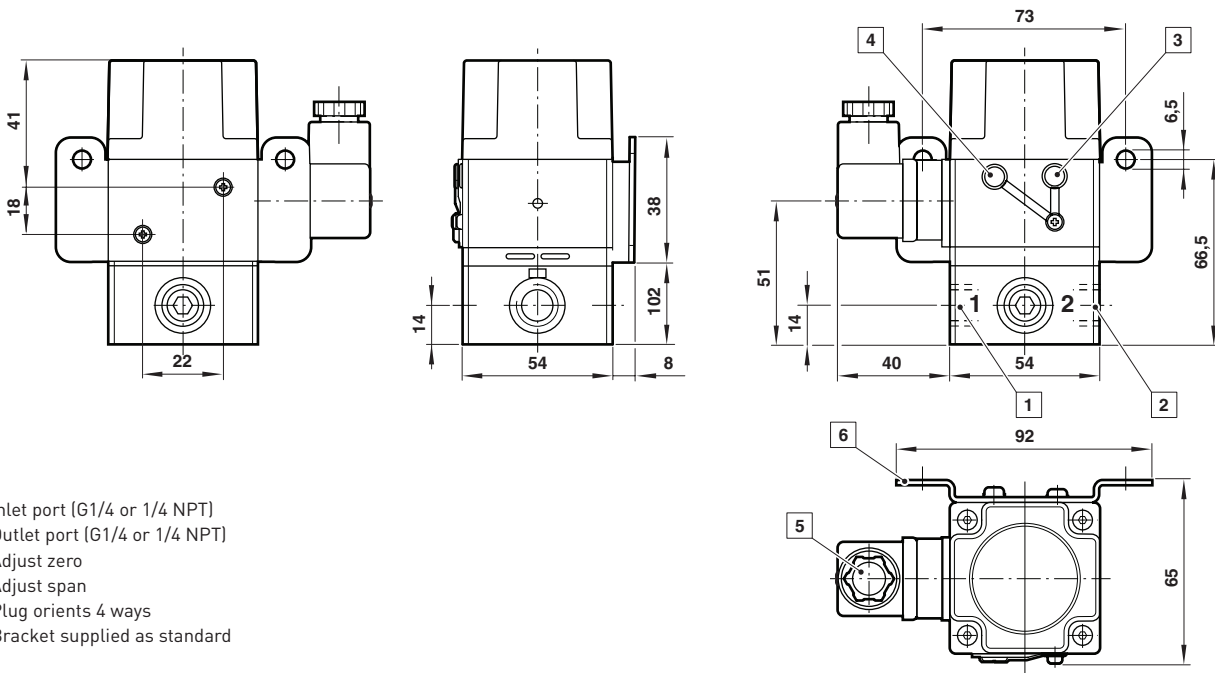
	Substitute
Standard	00
Weatherbox	10
Output pressure	Substitute
3 ... 15 psi	01
3 ... 27 psi	07
0,2 ... 1 bar	21

Other options available:

- Alternative input signal ranges
- Alternative pressure ranges
- Flying Leads
- Conduit entry with flying leads
- Junction box (M20 / 1/2" NPT)
- Intrinsically safe certification
- 50mm pipe mounting bracket
- Captured exhaust
- Reverse acting
- Split range
- For G 1/4 ports, contact your representative

Certification

Certification agency	Type 100X Intrinsically Safe
SIRA (CENELEC ATEX approved) to EN60079	Sira 02ATEX2002X Ex ia IIC T4 Ga (Ta = -40° to +80 °C) Ui = 28 V, Ii = 59 mA, Pi = 0.633 W Ci = 0 Li = 10 mH
	 

Dimensions

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.